



7-14-04

1712/648

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/089,292
Filing Date: 08/28/2002
Applicant: Hon Mun Ng, et al.
Group Art Unit: 1648
Examiner: Bao Q. Li
Title: NOVEL HEV ANTIGENIC PEPTIDE AND METHODS
Attorney Docket: 8737-000010

Director of The United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

RESPONSE TO RESTRICTION REQUIREMENT

Sir:

In response to the Office Action mailed June 15, 2004, Paper No. 6, please consider the following.

The Examiner is requiring restriction under 35 U.S.C. § 121 and 372. The Examiner is of the opinion that this application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

Group I, Claim(s) 1-4, 13-17, 22-25, 32-33, drawn to an isolated peptide of SEQ ID NO: 2, a fusion protein, a composition, a kit comprising the peptide, and a method of making the same.

Group II, Claim(s) 5-6, 8-12, drawn to a purified nucleic acid molecule comprising a DNA sequence of SEQ ID NO: 2 and a method of using the nucleic acid molecule.

Group III, Claim(s) 7, drawn to a nucleic acid molecule comprising SEQ ID NO: 3.

Group IV, Claim(s) 18-21 drawn to a method for determining the HEV anticodies.

Group V, Claim(s) 26-31, drawn to a method and a kit of detecting the presence of an HEV antigen.

Applicant respectfully traverses this requirement by the Examiner. U.S. Pat. No. 6,686,239 merely discloses a peptide consisting of 327 amino acids (from HEV burma strain SG3) (SEQ ID NO: 13) and a peptide consisting of 327 amino acids (from HEV Mexico strain) (SEQ IS NO: 14). Obviously, said peptides are actually not identical to the present peptide pE2 with 213 amino acids only (SEQ ID NO: 2), which is encoded by E2 isolated from the carboxy-terminal end of the ORF3 region of the HEV genome of Chinese strain D11092 of HEV (see page 7, second paragraph, PCT publication).

In addition, the Examiner's attention should also be drawn to the fact that the present application is direct to a novel antigen, pE2, encoded by part of ORF 2 of HEV, which is characterized by its conformational antigenic determinants. Actually, it is a smaller fragment of HEV major structural protein with more highly immunoractivity than known HEV antigen (see page PCT publication, page 5). Thus, the prior art cited by the Examiner is silent in said peptide.

Due to the above, U.S. Pat. No. 5,686,239, did not disclose the technical feature of present application and thus, the above-listed claims in groups 1-5 have unity of invention under the stipulation of PCT Rule 13.1.

Should the Examiner maintain this requirement, Applicant requests that the

Examiner proceed with Group I which is defined by Claims 1-4, 13-17, 22-25, 32 and 33. Applicant requests that the non-elected claims be held in abeyance for possible rejoinder and/or further prosecution in future divisional and/or continuation applications.

CONCLUSION

It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this Response is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: July 13, 2004
HARNESS, DICKEY & PIERCE, P.L.C.
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By:


Michael J. Schmidt
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MJS/pmg

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/089,292
	Filing Date	08/28/2002
	First Named Inventor	Hon Mun Ng, et al.
	Art Unit	1648
	Examiner Name	Bao Q. Li
Total Number of Pages in This Submission	Attorney Docket Number	8737-000010

ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Receipt Postcard		
<table border="1"><tr><td>Remarks</td><td>The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.</td></tr></table>			Remarks	The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name	Michael J. Schmidt	Reg. No.	34,007
Signature					
Date	July 13, 2004				

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Michael J. Schmidt	Express Mail Label No.	EV 533 146 506 US
Signature		Date	July 13, 2004

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